

## **DRINKING CONTAINER**

### **BACKGROUND OF THE INVENTION**

#### **Field of the Invention**

**[0001]** The present invention relates to a drinking container and, more specifically, a drinking container having optic panels, fluting, or other decorative design.

#### **Description of Related Art**

**[0002]** There are many unique features that have been applied to drinking containers. One such feature, as disclosed in United States Design Patent No. Des. 384,246 to McKnight, includes optic panels situated around the circumference of the interior of glassware. The optic panels create an illusion that the outside of the drinking container is paneled, when in fact the outside surface is smooth and cylindrical.

**[0003]** With the number of coffee and tea drinkers gradually increasing, various drinking containers have hereto been developed to appeal to the individual styles of this growing segment of the population. A drinker who utilizes any such unique drinking container expresses his or her individual style. Thus, a coffee or tea drinker may prefer a drinking container embodying optic panels which create the same effect as found in the prior art. To this end, a drinking container that is to hold a hot temperature beverage requires that the drinking container maintain both its aesthetically pleasing feature as well as its functionality. Prior art single-layer glassware with optic panels incorporated therein are not effective to create a paneled illusion, if the beverage, such as coffee, is dark. This is because a dark beverage prevents light from reflecting through the optic panels. Furthermore, single-layer glassware is not generally conducive to holding coffee and tea, as the lack of insulating layers causes the heat of the beverage to quickly dissipate or may even prevent the user from holding the hot drinking container.

**[0004]** Other material may be used to form the optic panels that create the desired paneled illusion in the presence of a dark, hot temperature beverage. Such insulating material needs to be fastened together, which precludes the use of glassware. Furthermore, the use of material other than glass results in the ability to mold the drinking container with functional elements, decreased weight, increased flexibility in decorating the drinking container, and cheaper production costs.

**[0005]** Accordingly, what is needed and has not heretofore been developed is a functional drinking container for holding dark, hot temperature beverages that appear to have a paneled external appearance when in fact the external surface is smooth and cylindrical.

### SUMMARY OF THE INVENTION

[0006] The present invention provides, in the preferred embodiment, a drinking container including a shell having an outer surface, an inner surface, a top portion, a base, and a plurality of optic panels formed on the inner surface of the shell. The drinking container further includes a sleeve having an open end, wherein the sleeve is fitted and secured inside the shell. Finally, a lid may be used to cover the drinking container and to fully contain a beverage therein. The shell is of a transparent material and the sleeve is of a reflective material. Preferably, the shell is acrylic and the sleeve is metallic. The combination of transparent and reflective materials causes the outer surface of the shell to have a paneled appearance, when in fact the outer surface of the shell is smooth and cylindrical. This paneled appearance is also noticeable when the drinking container holds a dark, hot temperature beverage. The construction of the drinking container in terms of material results in the ability to mold the drinking container with functional elements, increased flexibility in decorating the drinking container, and cheaper production costs.

[0007] The optic panels may be substituted with other designs, including fluting of various widths. Alternatively, the inner surface of the shell may include other symmetrical and/or asymmetrical designs, figures, shapes, patterns, etc. Furthermore, instead of having the optical panels or other design formed on the inner shell, the optic panels may also be formed on an outside surface of the sleeve.

[0008] These and other advantages of the present invention will be understood from the description of the preferred embodiments, taken with the accompanying drawings, wherein like reference numerals represent like elements throughout.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 is a top perspective view of a drinking container according to a preferred embodiment of the present invention;

[0010] FIG. 2 is a top perspective view of the drinking container shown in FIG. 1 without a lid;

[0011] FIG. 3 is a top perspective view of the sleeve;

[0012] FIG. 4 is a top perspective view of the drinking container shown in FIG. 1 without a sleeve;

[0013] FIG. 5 is top view of the drinking container shown in FIG. 1 with neither a lid nor a sleeve;

[0014] FIG. 6 is a top view of the lid of the drinking container shown in FIG. 1; and

[0015] FIGS. 7-12 are views of a drinking container according to an alternative embodiment of the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0016] For purposes of the description hereinafter, the spatial or directional terms, such as “inner”, “outer”, “top”, “bottom”, “downward”, and derivatives thereof, shall relate to the invention as it is oriented in the drawing figures. However, it is to be understood that the invention may assume various alternative variations, except where expressly specified to the contrary. It is also to be understood that the specific apparatus illustrated in the attached drawings, and described in the following specification, is simply an exemplary embodiment of the invention. Hence, specific dimensions and other physical characteristics related to the embodiments disclosed herein are not to be considered as limiting.

[0017] A drinking container 10 according to the present invention is illustrated in FIGS. 1-6. In the preferred embodiment, as depicted in FIG. 1, the basic elements of the drinking container 10 include a shell 12, a sleeve 14, a lid 16, and a handle 18. The drinking container 10 may assume various dimensions, yet still be practical in size for drinking purposes. FIG. 1 shows the drinking container 10 assembled with all of the above-identified elements, whereas FIGS. 2 and 4 show the drinking container 10 with the lid 16 removed and the sleeve 14 removed, respectively. Thus, in the preferred embodiment, the basic construction of the drinking container 10 includes the sleeve 14 situated within the shell 12, the handle 18 affixed to the shell 12, and the lid 16 covering the top of the drinking container 10.

[0018] The shell 12 includes an outer surface 20, an inner surface 22, a top portion 24, and a base 26. In the preferred embodiment, the shell 12 is substantially cylindrical in shape, yet has a slight taper extending from the top portion 24 to the base 26. The shell 12 includes a plurality of optic panels 28 on the inner surface 22 of the shell 12, preferably integrated with the inner surface 22. The plurality of optic panels 28 preferably extends heightwise from the top portion 24 of the shell 12 toward the base 26 of the shell 12, preferably in a circumferential manner and closely spaced apart, as shown in FIG. 4. In the preferred embodiment, the material of shell 12 is a transparent acrylic although, ideally, the material may be any low-heat conductive transparent material. Due to the reflective properties of the plurality of optic panels 28, upon ordinary observation, the shell 12 appears to be paneled, when in actuality the surface of the shell 12 is smooth and cylindrical. A person having ordinary skill in the art would appreciate the dimensions and specific layout of the plurality of optic panels 28 required to achieve this desired visual effect for any embodiment of the drinking container 10. The optic panels 28 may be of any shape, width, or orientation, which

would provide the appearance of a non-smooth surface texture to the outer surface 20 of the shell 12. Thus, it is to be understood that other embodiments of the present invention may include fluting of various widths in place of the optic panels 28. Alternatively, the inner surface 22 of the shell 12 may include other symmetrical and/or asymmetrical designs. A design is to encompass any figure, pattern, or other ornamental shape. For example, a repeating triangular or random trapezoidal pattern may extend along the inner surface 22 of the shell 12. Furthermore, instead of having the optic panels 28 or other design formed on the inner shell, the optic panels 28 or such other design may be formed on an outside surface of the sleeve, thereby creating a similar optical effect, as that created by use of the design on the inner surface 22 of the shell 12.

[0019] The handle 18 is preferably affixed to a molded protruding section 30 on the shell 12. The handle 18 may be molded with grips to ergonomically accommodate the drinker's fingers and thumb. With reference to FIGS. 4 and 5, and with continuing reference to FIG. 1, a circumferential ledge 32 is situated at the top portion 24 of the shell 12. Additionally, a screw hole 34 is centrally located in the base 26 of the shell 12. The screw hole 34 is sufficient in diameter to accommodate a screw 36 therein. An insulating pad 38 is affixed to the bottom of the base 26. The insulating pad 38 allows the drinker to safely place the drinking container 10 with a hot beverage therein on most any surface.

[0020] With reference to FIGS. 2 and 3, and with continuing reference to FIG. 1, the sleeve 14 includes an open end 40, a closed end 42, a lip 44, a circumferential groove 46, and a threaded connection 48. In the preferred embodiment, the sleeve 14 is substantially cylindrical in shape, yet has a slight taper extending from the open end 40 to the closed end 42. Specifically, the dimensions of the sleeve 14 are such that, when the sleeve 14 is fully inserted into the shell 12, the sleeve 14 does not abut the shell 12. This creates an insulative air layer to reduce the heat transfer from the hot beverage in the sleeve 14 to the outer surface 20 of the shell 12. Preferably, the material of the sleeve 14 is metallic although, ideally, the material may be any reflective material which may be subjected to high temperature liquids yet not undergo any structural deformities, such as melting. To optimally produce the desired paneled illusion, the material of which the sleeve 14 is constructed ideally embodies a light reflective characteristic, such as found in most metals. It is to be understood that the metallic material may be a composite, such as, but not limited to, a metal and ceramic mix. The lip 44 is formed around the open end 40, resulting in the circumferential groove 46 to face downward. The threaded connection 48, for accommodating the screw 36 therein is situated at the closed end 42 of the sleeve 14. In the preferred embodiment, the sleeve 14 is fully

inserted into the shell 12 so that the circumferential groove 46 engages the circumferential ledge 32 of the shell 12. Thus, the lip 44 extends past the top portion 24 of the shell 12, yet is flush with the outer surface 20 of the shell 12. Additionally, the sleeve 14 is secured within the shell 12 by having the screw 36 inserted into the screw hole 34, pushed through the base 26 of the shell 12, and screwed into the threaded connection 48 of the sleeve 14. It is to be understood that various other means for securing the sleeve 14 within the shell 12 may be employed, including, but not limited to, snaps, rivets, and glue.

**[0021]** With reference to FIG. 5, and with continuing reference to FIG. 1, the lid 16 is used to cover the open end 40 of the sleeve 14. Preferably, the lid 16 frictionally engages the sleeve 14 so as to prevent the beverage from spilling out of the drinking container 10. The lid 16 may comprise various means for accessing manageable amounts of the beverage while minimizing heat loss. This includes, but is not limited to, a laterally slidable opening, a pivotable opening, or a latch incorporated within the lid 16.

**[0022]** As previously mentioned, in order to hold a dark, hot temperature beverage and provide the paneled illusion, the drinking container requires a different type of construction and the use of material other than single-layer glassware. Hence, the use of different materials, such as acrylic and metal, is preferred in terms of providing functionality of the drinking container and flexibility in the design of the drinking container. Additionally, acrylic materials are highly moldable. This allows for functional elements to be integrated within the drinking container 10, such as the circumferential ledge 32, the molded protruding section 30, and the screw hole 34. Furthermore, acrylic may be easily decorated in that acrylic is conducive to a variety of colors, patterns, and designs. These benefits translate into manufacturing cost savings.

**[0023]** The above invention has been described with reference to the preferred and alternative embodiments. Obvious modifications, combinations, and alterations will occur to others upon reading the preceding detailed description. It is intended that the invention be construed as including all such modifications, combinations, and alterations insofar as they come within the scope of the appended claims or the equivalents thereof.